

REMARKS

The new claims and the amendments to the claims do not add new matter. They are consistent with the original specification and drawings.

Claims 6 and 15 were objected to under 37 CFR 175(c). Claims 6 and 15 have been cancelled and therefore it is requested that the objection be withdrawn.

Claim 14 was rejected under 35 U.S.C. 102(b) as being anticipated by Song et al (US 5,935,643). Claim 14 has been cancelled and therefore it is requested that the 35 U.S.C. 102(b) be withdrawn.

Claims 1, 3, 7-11 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over Song et al (US 5,935,643) in view of Fan et al (US 2002/0134501). Song does not teach treating a restricted area. Song treats the entire carbon paper electrode substrate with a slurry. Neither col. 3 lines 10-16 nor col. 4 lines 10-15 teach, disclose or suggest treating a restricted area of the carbon paper substrate.

Song does not have a preshrunk porous substrate. There is no disclosure in Song that the carbon paper is preshrunk or that it is porous. Song specifically states that the carbon paper pores are closed -- col. 3 lines 15-16.

Song does not have or contemplate having two areas on his carbon paper substrate where the restricted area is less hydrophobic than a surrounding area.

Fan likewise does not teach, disclose or suggest any of the above.

Neither Song nor Fan teach, disclose or suggest steps (a) and (c) of new claims 16-19 nor the steps claimed in claims 17 and 19. Thus the invention set forth in claims 1, 3, 7-11, 13 and new claims 16-19 is not obvious or predictable to a person of ordinary skill in the art based on Song in view of Fan. For the reasons set forth above, it is requested that the rejection of these claim under 35 USC 103(b) be withdrawn and that these claims be allowed.

Claims 2, 4-6, 12 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Song and Fan as applied to claims 1, 3, 7-11 and 13 above and further in view of Furuya (US 5,618,392). Neither Song nor Fan teach, disclose or suggest the subject matter of these claims for the reasons already set forth. Further, as the Examiner recognizes, neither Song nor Fan disclose the well of claims 2, 4 and new claims 16-19. The Furuya patent teaches and

discloses having a gas diffusion electrode 25 with grooves 22. Furuya does not teach, disclose or suggest that his electrode can be made by forming a well in a preshrunk substrate and dispensing a slurry of catalyst into well and forming the electrode with the slurry in the well. Furuya only suggests to one of ordinary skill in the art that our electrode as shown in step 7 of Applicant's Fig. 1 can be used instead of Furuya's catalytic layer 24.

With respect to claim 12 and new claims 16-22. it would not be obvious to eliminate the carbon paper of Song for a PTFE sheet. Such a substitution would destroy the intent of Song's invention. To destroy the teachings of Song is not obvious or contemplated by a person of ordinary skill in the art. Further Furuya does not teach using a preshrunk PTFE sheet which has had a slurry catalyst deposited in the well area formed on a preshrunk PTFE sheet.

Therefore, the invention set forth in claims 2, 4-6, 12 and 15 and new claims 16-19 would not be not obvious or predictable to a person of ordinary skill in the art by Stone in view of Fan and further in view of Furuya. For the reasons set forth above and thus it is requested that rejection of these claim under 35 USC 103(b) be withdrawn and that these claims be allowed.

Claims 20 and 21 have been written as proper article claims and are not obvious in view of Stone, Fan and Furuya for reasons set forth above and it is requested that these claims be allowed.

Applicant submits that the application is now in condition for allowance and an early notice of allowance is requested.

Dated: May 28, 2009

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